§ 173.63

Number identifying packaging requirement or exception	Explanation of packaging requirement or exception
D6	Inner packagings are not required if the pack- ing configuration restricts freedom of move- ment of the caps and protects them from im- pact forces.
D7	Quantity limitations for detonator assemblies with detonating cord are: (a) No more than 50 detonator assemblies may be packed in one inner packaging. (b) No more than 500 detonator assemblies may be packed in one outer packaging.
D8	Quantity limitations for detonator assemblies with safety fuse or shock tube are: (a) No more than 50 detonator assemblies may be packed in one inner packaging. (b) No more than 1,000 detonator assemblies may be packed in one outer packaging.
D9	Primers fitted with anvil, composition not covered with a disc of metal foil or other material (varnished only). (a) The primers must be packed in rows in single layers in trays of fiberboard or plastic. (b) Not more than 500 primers may be packed in an inner packaging.
D10	Detonators that are non-electric (including per- cussion activated) or detonating relays in metal tubes must be packed as follows: (a) The detonators must be packed in an inner packaging with the open end of any deto- nator covered with appropriate cushioning material; (b) Inner packagings must be snug- ly packed in an intermediate packaging; (c) Intermediate packagings must be separated from the outside packaging by at least 25 mm (1 inch) of cushioning material; (d) Deto- nators containing no more than 10 g of ex- plosive (excluding ignition and delay charges) must be packed as follows: (i) No more than 50 detonators in one inner pack- aging. (ii) No more than 500 detonators in one outer packaging. (e) Detonators contain- ing no more than 3 g of explosive (excluding ignition and delay charges) must be packed as follows: (i) No more than 110 detonators in one inner packaging. (ii) No more than 5,000 detonators in one outer packaging.
D11	Primers not fitted with an anvil, composition covered, not more than 5,000 primers may
	be packed in an inner packaging.
D12	Large articles may be carried unpackaged.
D13	No inner packaging required for drums, fiber (1G).
D14	Inner packaging is not required with fiberboard boxes (4G) for packaging UN 0332.
D15	Sheets, waterproof, when used, must also be impervious to any liquid explosive ingredients of the substance.
() (1)	4 (1)

(e) Class 1 (explosive) materials owned by the Department of Defense, packaged prior to January 1, 1990 in accordance with the requirements of this subchapter in effect at that time, are excepted from the requirements of part 178 of this subchapter provided the packagings have maintained their integrity and the goods are declared as

government-owned goods packaged prior to January 1, 1990.

[Amdt. 173–224, 55 FR 52617, Dec. 21, 1990, as amended at 56 FR 66267, Dec. 20, 1991; Amdt. 173–236, 58 FR 50236, Sept. 24, 1993; Amdt. 173–235, 58 FR 50502, Sept. 27, 1993; Amdt. 173–234, 58 FR 51532, Oct. 1, 1993; Amdt. 173–241, 59 FR 67492, 67506, Dec. 29, 1994; Amdt. 173–242, 60 FR 26806, May 18, 1995; Amdt. 173–246, 60 FR 49110, Sept. 21, 1995]

§173.63 Packaging exceptions.

- (a) Cord, detonating (UN 0065), having an explosive content not exceeding 6.5 g (0.23 ounces) per 30 centimeter length (one linear foot) may be offered for transportation domestically and transported as Cord, detonating (UN 0289), Division 1.4 Compatibility Group D (1.4D) explosives, if the gross weight of all packages containing Cord, detonating (UN 0065), does not exceed 45 kg (99 pounds) per:
- (1) Transport vehicle, freight container, or cargo-only aircraft;
- (2) Off-shore down-hole tool pallet carried on an off-shore supply vessel;
- (3) Cargo compartment of a cargo vessel; or
- (4) Passenger-carrying aircraft used to transport personnel to remote work sites, such as offshore drilling units.
- (b) Cartridges, small arms, and cartridges power devices. (1) Cartridges, small arms, and cartridges power devices (which are used to project fastening devices) which have been classed as a Division 1.4S explosive may be reclassed, offered for transportation, and transported as ORM-D material when packaged in accordance with paragraph (b)(2) of this section; such transportation is excepted from the requirements of subparts E (Labeling) and F (Placarding) of part 172 of this subchapter. Cartridges, small arms, and cartridges power devices that may be shipped as ORM-D material is limited to:
- (i) Ammunition for rifle, pistol or shotgun;
- (ii) Ammunition with inert projectiles or blank ammunition;
- (iii) Ammunition having no tear gas, incendiary, or detonating explosive projectiles;
- (iv) Ammunition not exceeding 12.7 mm (50 caliber or 0.5 inch) for rifle or pistol, cartridges or 8 gauge for shotshells; and

- (v) Cartridges, power devices which are used to project fastening devices.
- (2) Packaging for cartridges, small arms, and cartridges power devices as ORM-D material must be as follows:
- (i) Ammunition must be packed in inside boxes, or in partitions which fit snugly in the outside packaging, or in metal clips;
- (ii) Primers must be protected from accidental initiation;
- (iii) Inside boxes, partitions or metal clips must be packed in securely-closed strong outside packagings;
- (iv) Maximum gross weight is limited to 30 kg (66 pounds) per package; and
- (v) Cartridges, power devices which are used to project fastening devices and 22 caliber rim-fire cartridges may be packaged loose in strong outside packagings.
 - (c)—(e) [Reserved]
- (f) Detonators containing no more than 1 g explosive (excluding ignition and delay charges) that are electric blasting caps with leg wires 4 feet long or longer, delay connectors in plastic sheaths, or blasting caps with empty plastic tubing 12 feet long or longer may be packed as follows in which case they are excepted from the packaging requirements of §173.62:
- (1) No more than 50 detonators in one inner packaging;
- (2) IME Standard 22 container or compartment is used as the outer packaging;
- (3) No more than 1000 detonators in one outer packaging; and
- (4) No material may be loaded on top of the IME Standard 22 container and no material may be loaded against the outside door of the IME Standard 22 compartment.
- (g) Detonators that are classed as 1.4B or 1.4S and contain no more than 1 g of explosive (excluding ignition and delay charges) may be packed as follows in which case they are excepted from the packaging requirements of §173.62:
- (1) No more than 50 detonators in one inner packaging;
- (2) IME Standard 22 container is used as the outer packaging;
- (3) No more than 1000 detonators in one outer packaging; and

(4) Each inner packaging is marked "l.4B Detonators" or "l.4S Detonators", as appropriate.

[Amdt. 173–224, 55 FR 52617, Dec. 21, 1990, as amended at 56 FR 66268, Dec. 20, 1991; Amdt. 173–236, 58 FR 50536, Sept. 24, 1993; Amdt. 173–253, 61 FR 27175, May 30, 1996]

Subpart D—Definitions Classification, Packing Group Assignments and Exceptions for Hazardous Materials Other Than Class 1 and Class 7

SOURCE: Amdt. 173–224, 55 FR 52634 Dec. 21, 1990, unless otherwise noted.

§173.115 Class 2, Divisions 2.1, 2.2, and 2.3—Definitions.

- (a) Division 2.1 (Flammable gas). For the purpose of this subchapter, a flammable gas (Division 2.1) means any material which is a gas at 20°C (68°F) or less and 101.3 kPa (14.7 psi) of pressure (a material which has a boiling point of 20°C (68°F) or less at 101.3 kPa (14.7 psi)) which—
- (1) Is ignitable at 101.3 kPa (14.7 psi) when in a mixture of 13 percent or less by volume with air; or
- (2) Has a flammable range at 101.3 kPa (14.7 psi) with air of at least 12 percent regardless of the lower limit.

Except for aerosols, the limits specified in paragraphs (a)(1) and (a)(2) of this section shall be determined at 101.3 kPa (14.7 psi) of pressure and a temperature of 20°C (68°F) in accordance with ASTM E681-85, Standard Test Method for Concentration Limits of Flammability of Chemicals or other equivalent method approved by the Associate Administrator for Hazardous Materials Safety. The flammability of aerosols is determined by the tests specified in §173.306(i) of this part.

- (b) Division 2.2 (non-flammable, non-poisonous compressed gas—including compressed gas, liquefied gas, pressurized cryogenic gas, compressed gas in solution, asphyxiant gas and oxidizing gas). For the purpose of this subchapter, a nonflammable, nonpoisonous compressed gas (Division 2.2) means any material (or mixture) which—
- (1) Exerts in the packaging an absolute pressure of 280 kPa (40.6 psia) or greater at 20 $^{\circ}$ C (68 $^{\circ}$ F), and